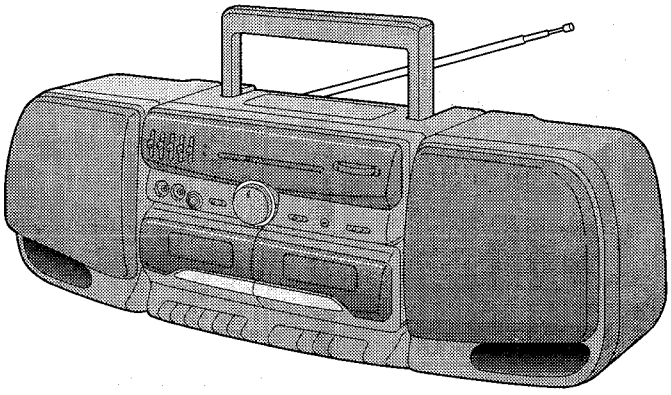
SHARP SERVICE MANUAL

No. SX675WF931TBK



WF-931T(BK)

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

● General

Power source:	AC 220-230 V,50 Hz DC 12 V ["D" size (UM/SUM-1, R20 or HP-2) battery × 8 or external DC 12V]
Power consumption:	30 W
Output power:	PMPO; 60 W (30 W + 30 W) (AC operation) MPO (Max.); 20 W (10 W + 10 W) (AC operation) RMS; 10 W (5 W + 5 W) (DC operation, DIN 45 324)
Input terminal:	Mixing microphone; 600 ohms CD/LINE; 350 mV/47 kohms
Output terminal:	Headphones; 16-50 ohms (recommended; 32 ohms)
Dimensions:	Width; 300 mm (11-13/16") Height; 217 mm (8-9/16") Depth; 186 mm (7-3/8")
Weight:	2.9 kg (6.4 lbs.) without batteries

● Radio section

Frequency range:	FM; 64 - 108 MHz MW; 526.5 - 1,606.5 kHz LW; 148.5 -283.5 kHz

● Tape recorder section

Frequency response:	60 - 12,000 Hz (Normal tape)
Signal/noise ratio:	40 dB (TAPE 1, recording/playback) 55 dB (TAPE 2, playback)
Wow and flutter:	0.15 % (DIN 45 511)
Motor:	DC 12 V electric governor
Bias system:	AC bias
Erase system:	Magnet erase

● Speaker section

Type:	2-way type
Speakers:	12 cm (4-3/4") free-edge woofer × 2 Tweeter × 2
Maximum input power:	10 W
Impedance:	3 ohms
Dimensions:	Width; 195 mm (7-11/16") Height; 217 mm (8-9/16") Depth; 189 mm (7-1/2")
Weight:	1.2 kg (2.6 lbs.)/each

Specifications for this model are subject to change without prior notice.

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1, 2 and 5 of the disassembly method to remove the tape mechanism. (See page 4.)

How to remove the record / playback, playback and erase heads (See Fig. 5-1 and 5-2.)

1. Remove the screws (A1) x 2 pcs., to remove the record/ playback head.
2. Remove the hooks (A2) x 2 pcs., toward the center position as shown in Fig. 5-1. and then extract the erase head upward.
3. Remove the screws (B1) x 2 pcs., to remove the playback head.

Note:

1. The playback head of this mechanism is supplied as finished product with flexible PWB.
   Before removing the flexible PWB, remove the solder on the switch.
2. After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

How to remove the pinch roller (See Fig. 5-3.)

1. Carefully bend the pinch roller pawl in the direction of the arrow Ⓐand remove the pinch roller (C1) upwards.

How to remove the motor (See Fig. 5-4.)

1. Remove the belt.
2. Remove the screws (D1) x 4 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

Note:

When mounting the motor, pay attention to the motor mounting angle.

How to remove the belts (See Fig. 5-5.)

1. Remove the main belt (E1) x 1 pc., at the tape 1 side from the motor pulley.
2. Remove the main belt (E2) x 1 pc., at the tape 2 side from the motor pulley.
3. Remove the REW/FF belt (E3) x 2 pcs., from the REW/FF roller.
4. Put on the belts in the reverse order of removal.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

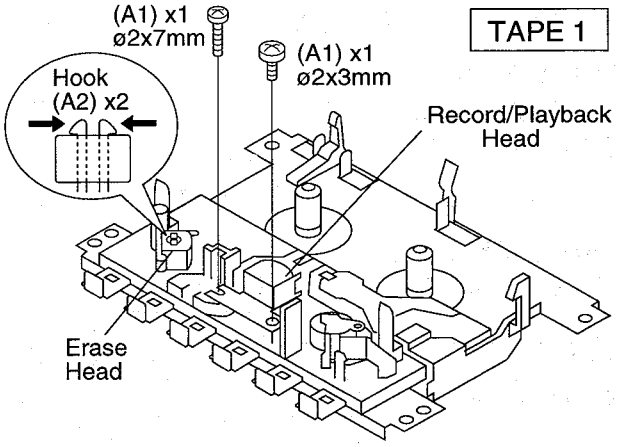


Figure 5-1

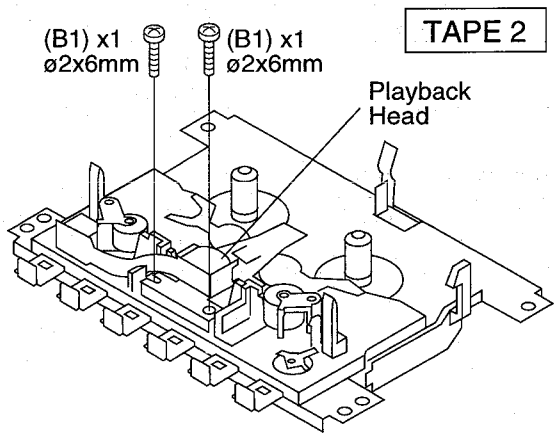


Figure 5-2

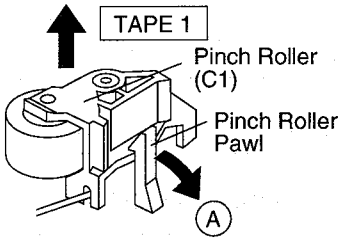


Figure 5-3

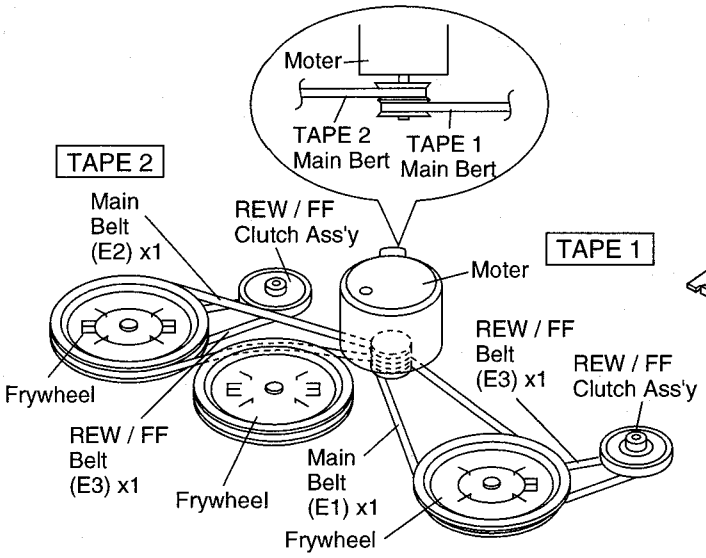


Figure 5-5

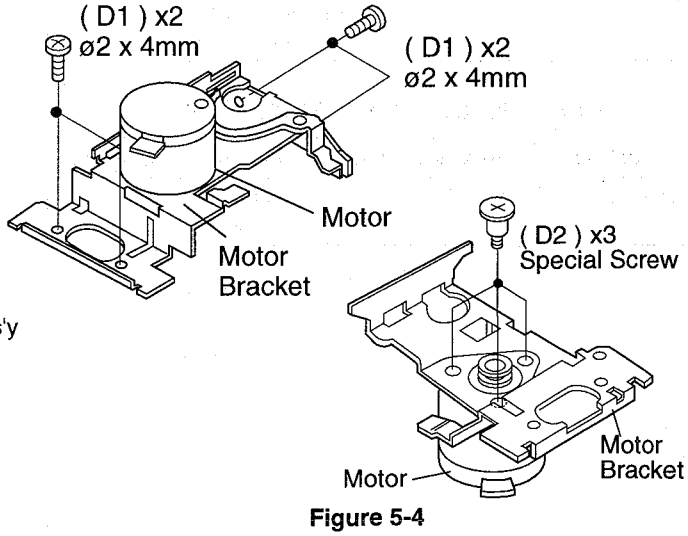


Figure 5-4

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Tape 1: Over 50g Tape 2: Over 60 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 60 g.cm	30 to 60 g.cm
Fast forward: TW-2231	55 to 120 g.cm	80 to 135 g.cm
Rewind: TW-2231	55 to 120 g.cm	80 to 135 g.cm

• Head Azimuth

Test Tape	Instrument Connection
MTT-114	Headphones Socket (Load resistance: 32 ohms)

• Tape Speed (Normal only)

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Tape 1,2: VR501	3,000 ± 60 Hz	Headphones socket(Load resistance: 32 ohms)

TAPE SECTION

Position of each switch or control	
Volume control	Max
Beat cancel	A
Function/Power	Tape/Stand-by
Dubbing speed/Built-in Microphone	OFF/Mic ON

• Bias Oscillation Frequency

	Specified Value
Beat cancel	A: 100 ± 4 kHz B: 94 ± 4 kHz C: 104 ± 4 kHz

• Playback Amplifier Sensitivity Check

Test Tape	Specified Value	Instrument Connection
MTT-118	1.3 V ± 3 dB	Speaker terminal (Load resistance: 3 ohms)

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

• AM IF/RF

Test Stage	Specified Value/Adjusting Point	Instrument Connection
IF	T3	Input: Antenna Output: Pin 3 of IC2
MW Band Coverage	fL: L6 fH: TC8	Input: Antenna Output: Headphones Socket (Load resistance: 32ohms)
MW Tracking	fL (600 kHz): L3 (MW) fH (1,400 kHz): TC7	
LW Band Coverage	fL(148.5kHz): L7 fH(283.5kHz): TC4	
LW Tracking	fL : (LW) fH : TC2	

• FM IF/RF

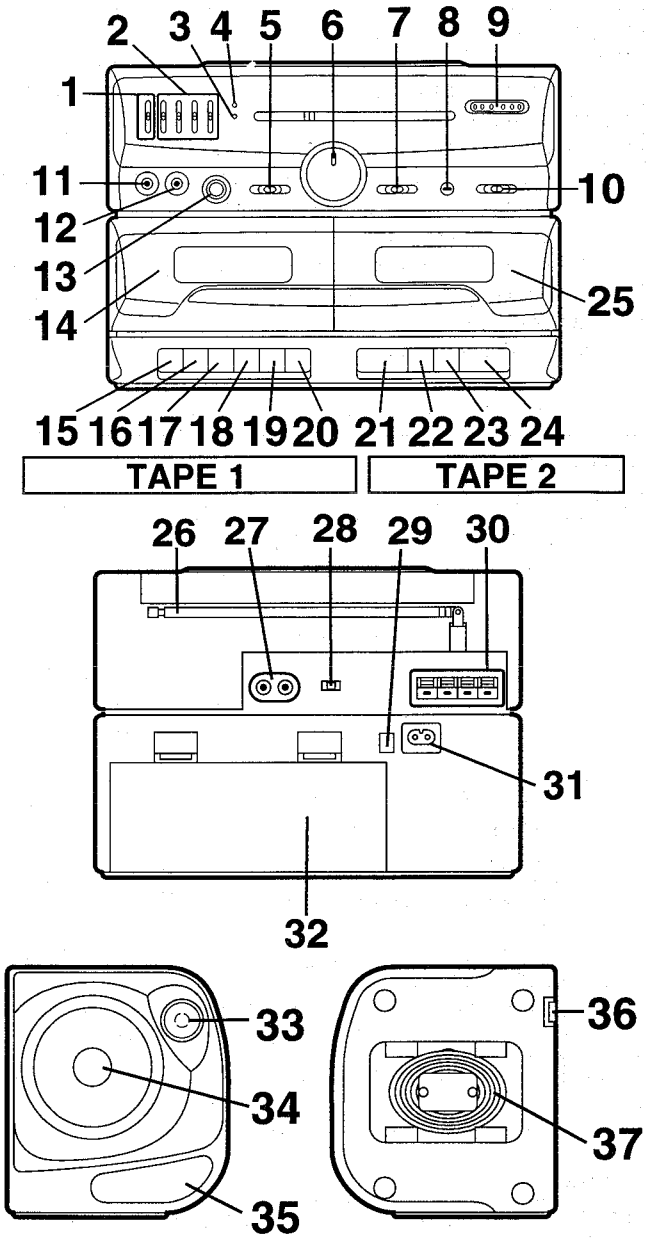
Test Stage	Specified Value/Adjusting Point	Instrument Connection
IF	T1	Input: Antenna Output: Pin 17 of IC2
Detection	T2	
Band Coverage	fL: L2 fH: TC6	Input: Antenna Output: Headphones Socket (Load resistance: 32ohms)
Tracking	fL (88.0 MHz): L1 fH (108.0 MHz): TC5	

• VCO Frequency

Test Stage	Specified Value	Instrument Connection
VR1	76 kHz ± 200 Hz	Pin 13 of IC2

NAMES OF PARTS

1. Extra Bass Control: X-BASS
2. Graphic Equalizer Controls
3. FM Stereo Indicator
4. Power Indicator
5. Function Selector Switch
6. Volume Control
7. Dubbing Speed/Built-in Microphone/FM Mode Switch
8. Built-in Microphone
9. Tuning Control
10. Band Selector Switch
11. Headphone Socket
12. Mixing Microphone Socket
13. FM Mode Switch
14. (TAPE 1) Cassette Compartment
15. (TAPE 1) Record Button: ●
16. (TAPE 1) Play Button: ►
17. (TAPE 1) Rewind Button: ◄◄
18. (TAPE 1) Fast Forward Button: ►►
19. (TAPE 1) Stop/Eject Button: ■≙
20. (TAPE 1) Pause Button: ❚❚
21. (TAPE 2) Play Button: ►
22. (TAPE 2) Rewind Button: ◄◄
23. (TAPE 2) Fast Forward Buttons: ►►
24. (TAPE 2) Stop/Eject Button: ■≙
25. (TAPE 2) Cassette Compartment
26. FM Telescopic Rod Aerial
27. CD/Line Input Sockets
28. Beat Cancel Switch
29. DC Power Input Socket
30. Speaker Terminals
31. AC Power Input Socket
32. Battery Compartment
33. Twsster
34. Woofer
35. Bass Reflex Duct
36. Speaker Release Lever
37. Speaker Wire



FITTING OF DIAL POINTER

1. Remove the main PWB. Attach the dial pointer as shown arrow Ⓐ on the front cabinet, putting it into the section indicated by arrow Ⓑ. Insert it between the arrows Ⓒ.
2. Install the main PWB in the front cabinet and secure it with the two screws.
3. Turn the dial drum in the direction indicated by arrow Ⓓ. Set the dial pointer to point "0", and then make the rest of the adjustments.

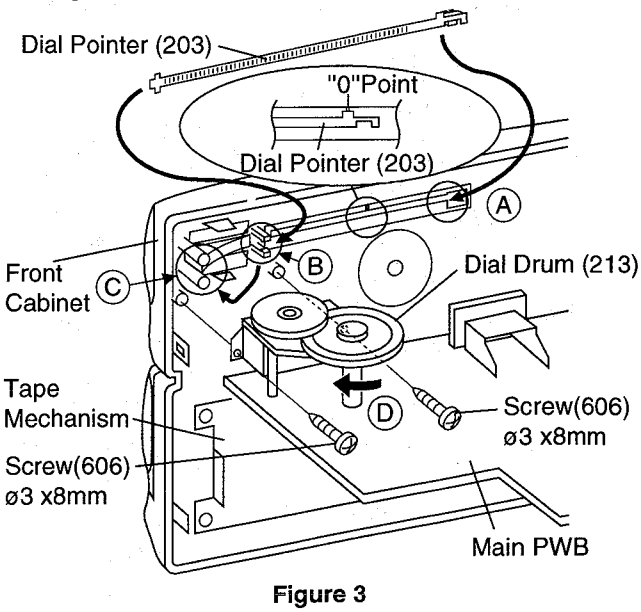


Figure 3

DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit and remove the batteries from the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

MAIN UNIT

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Cabinet/ Rear Cabinet	1. Battery Compartment Lid ..... (A1)x1 2. Screw ..... (A2)x4 3. Screw ..... (A3)x1 4. Screw ..... (A4)x1 5. Screw ..... (A5)x3 6. Socket ..... (A6)x1 7. Tip ..... (A7)x1	4-1
2	Main PWB/ Volume PWB/ Surround PWB	1. Knob ..... (B1)x1 2. Socket ..... (B2)x5 3. Screw ..... (B3)x2	4-2
3	Graphic Equalizer PWB	1. Screw ..... (C1)x4	4-2
4	LED PWB	1. Screw ..... (D1)x2	4-2
5	Tape Mechanism	1. Open the cassette holder 2. Screw ..... (E1)x5	4-2
6	Power PWB	1. Screw ..... (F1)x1 2. Bracket ..... (F2)x1	4-3

SPEAKER

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Screw ..... (G1)x4	4-4
2	Woofer	1. Screw ..... (H1)x4	4-4

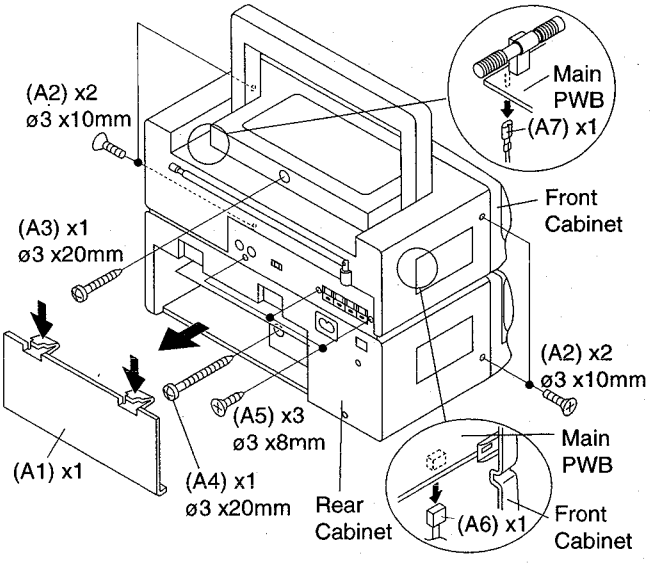


Figure 4-1

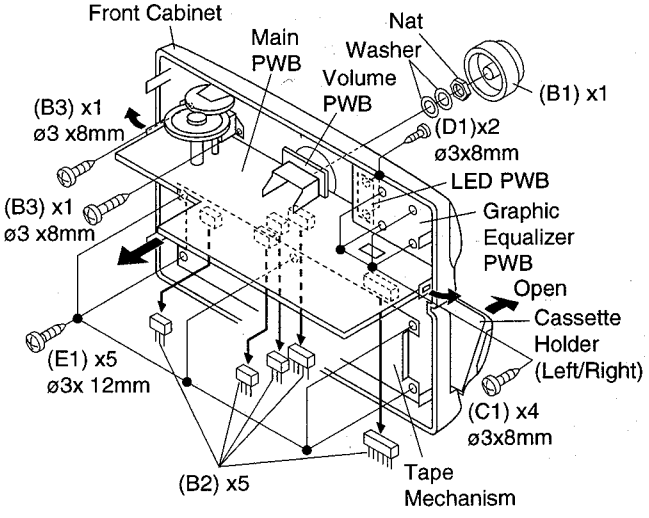


Figure 4-2

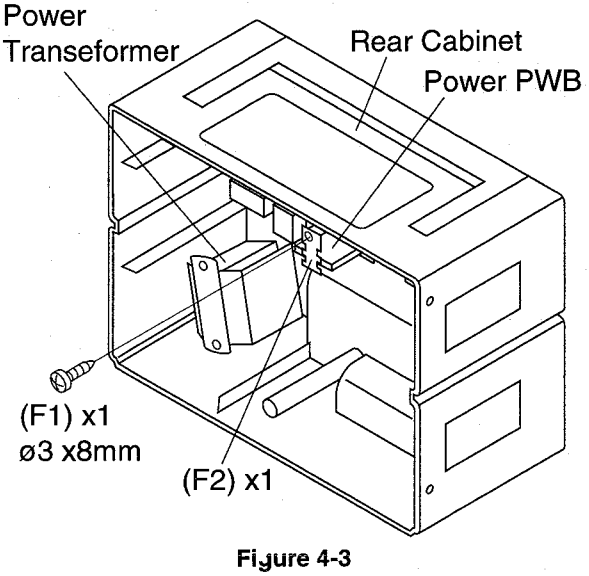


Figure 4-3

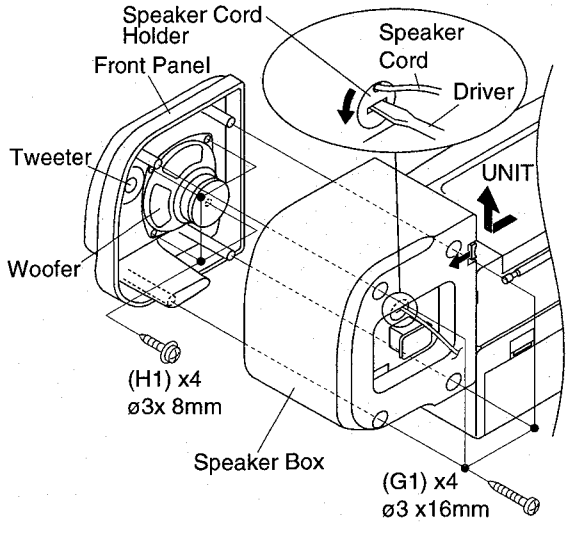


Figure 4-4

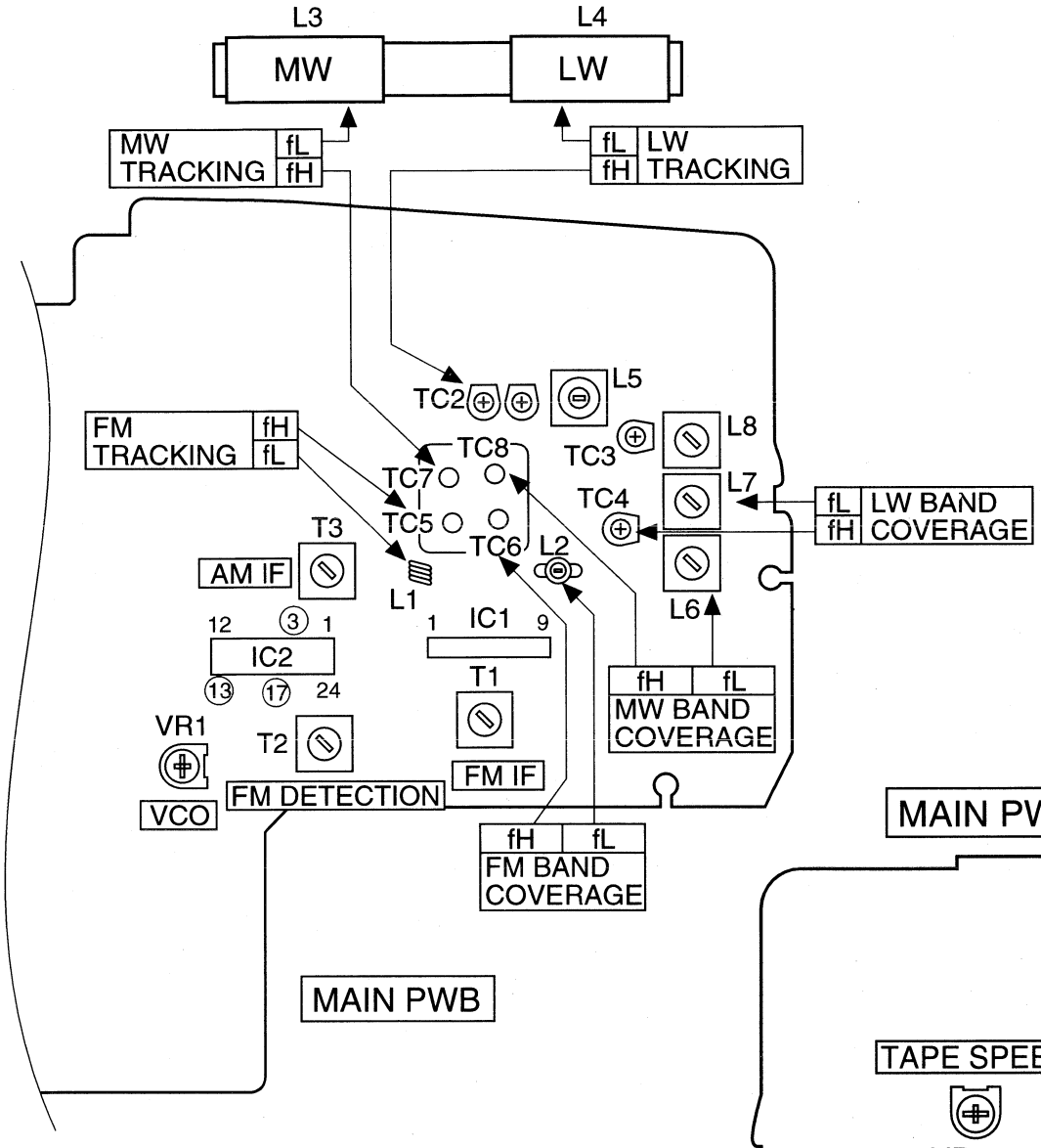


Figure 7-1 ADJUSTMENT POINTS

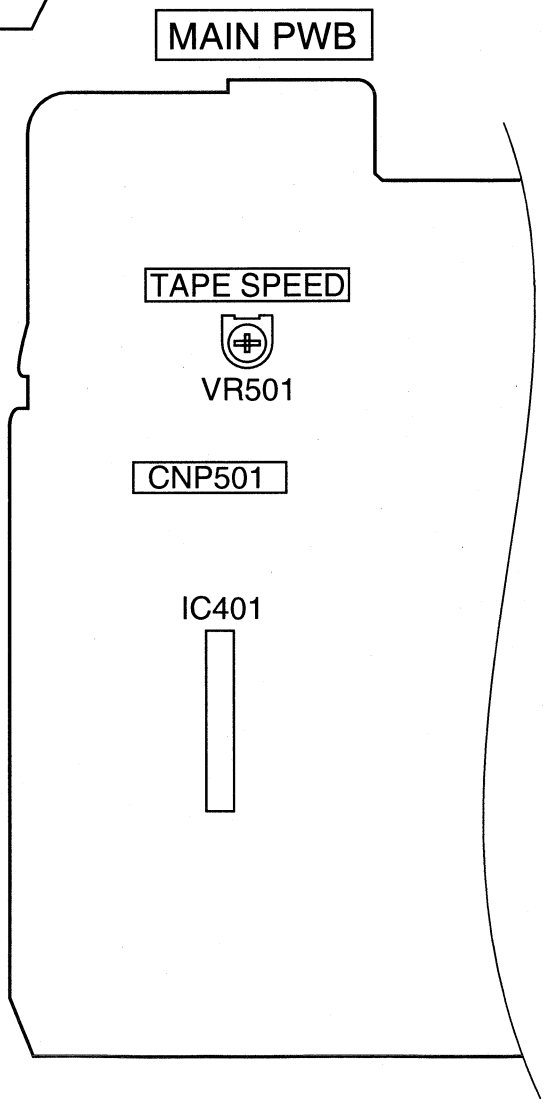
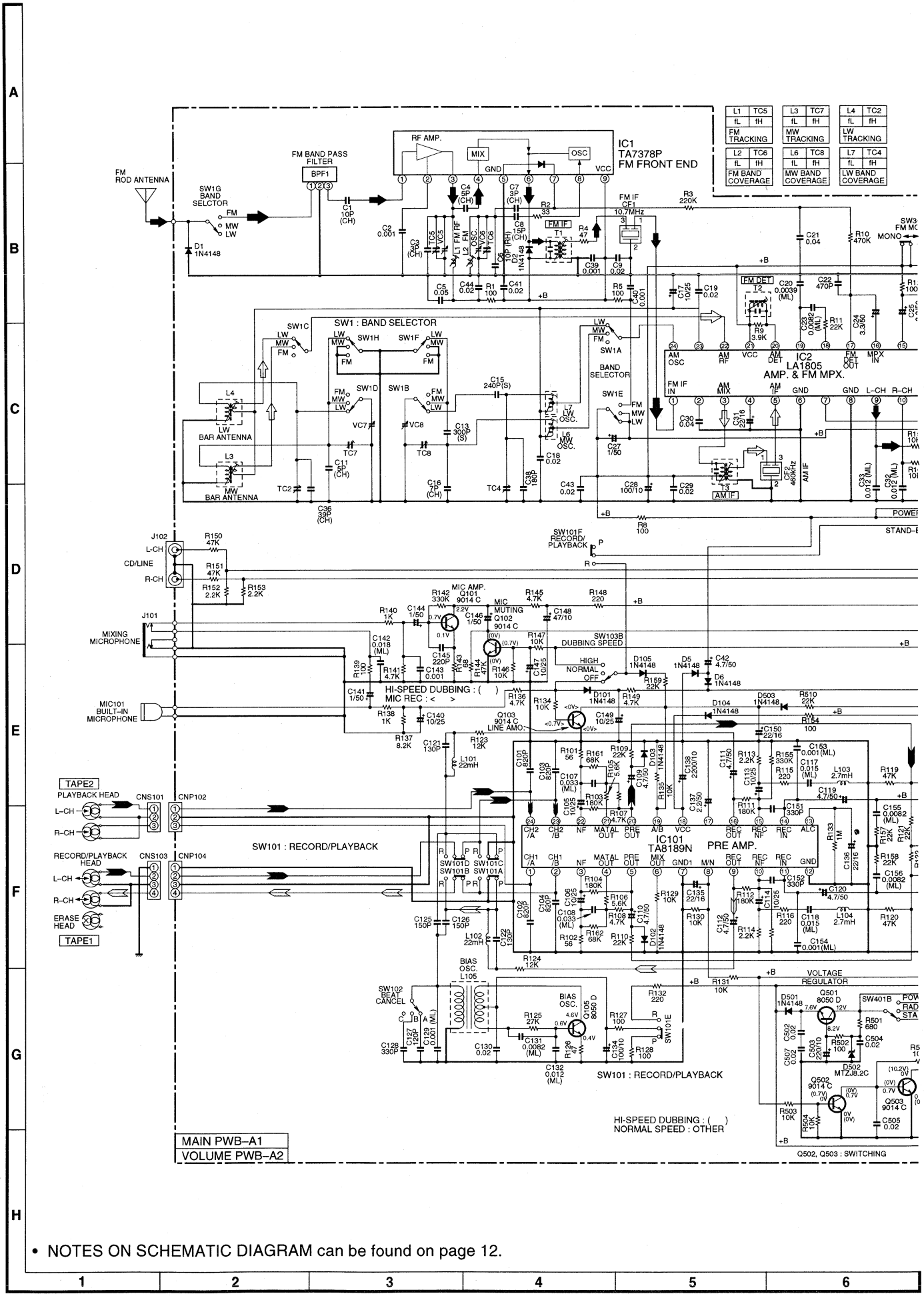
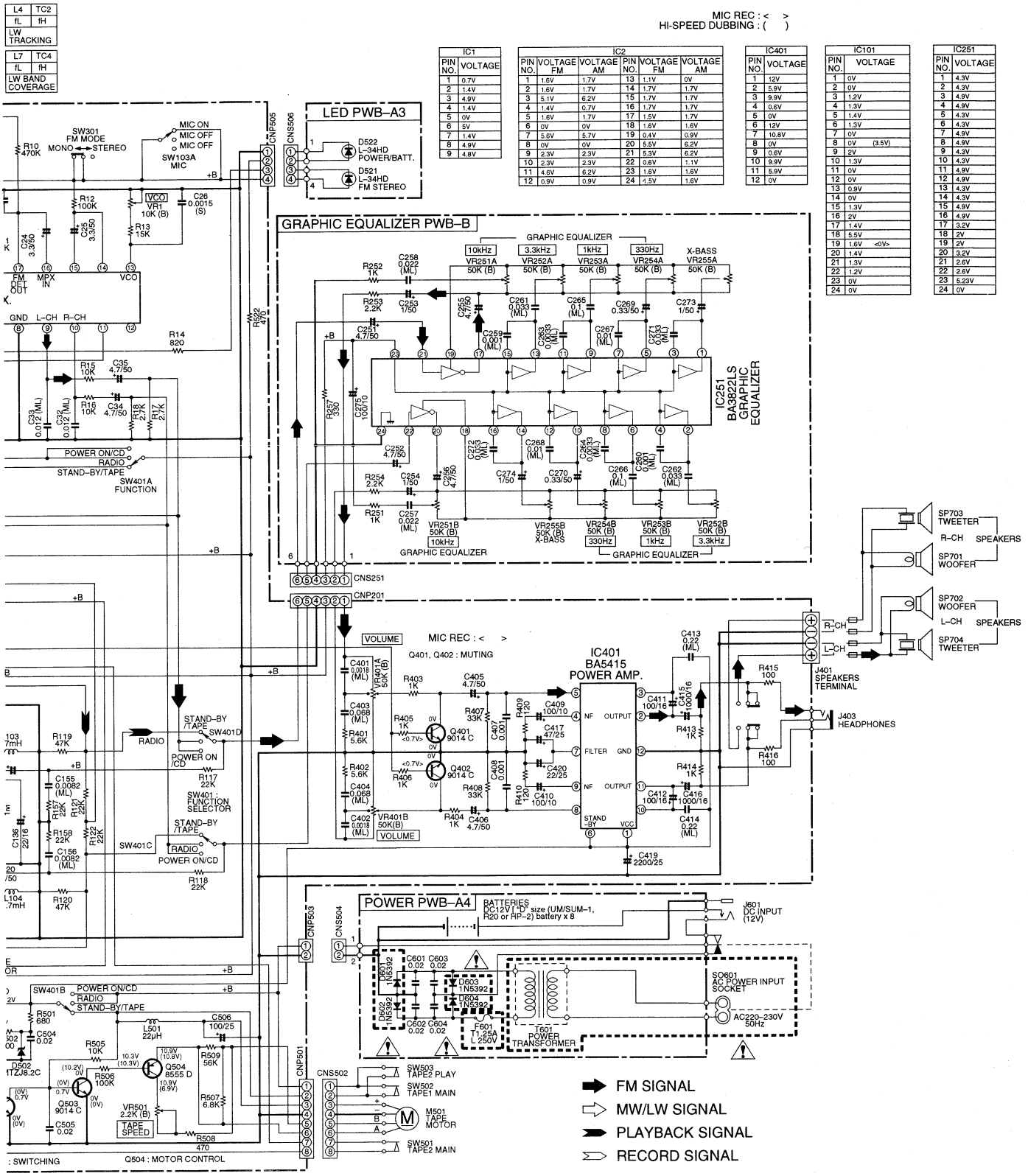


Figure 7-2 ADJUSTMENT POINTS



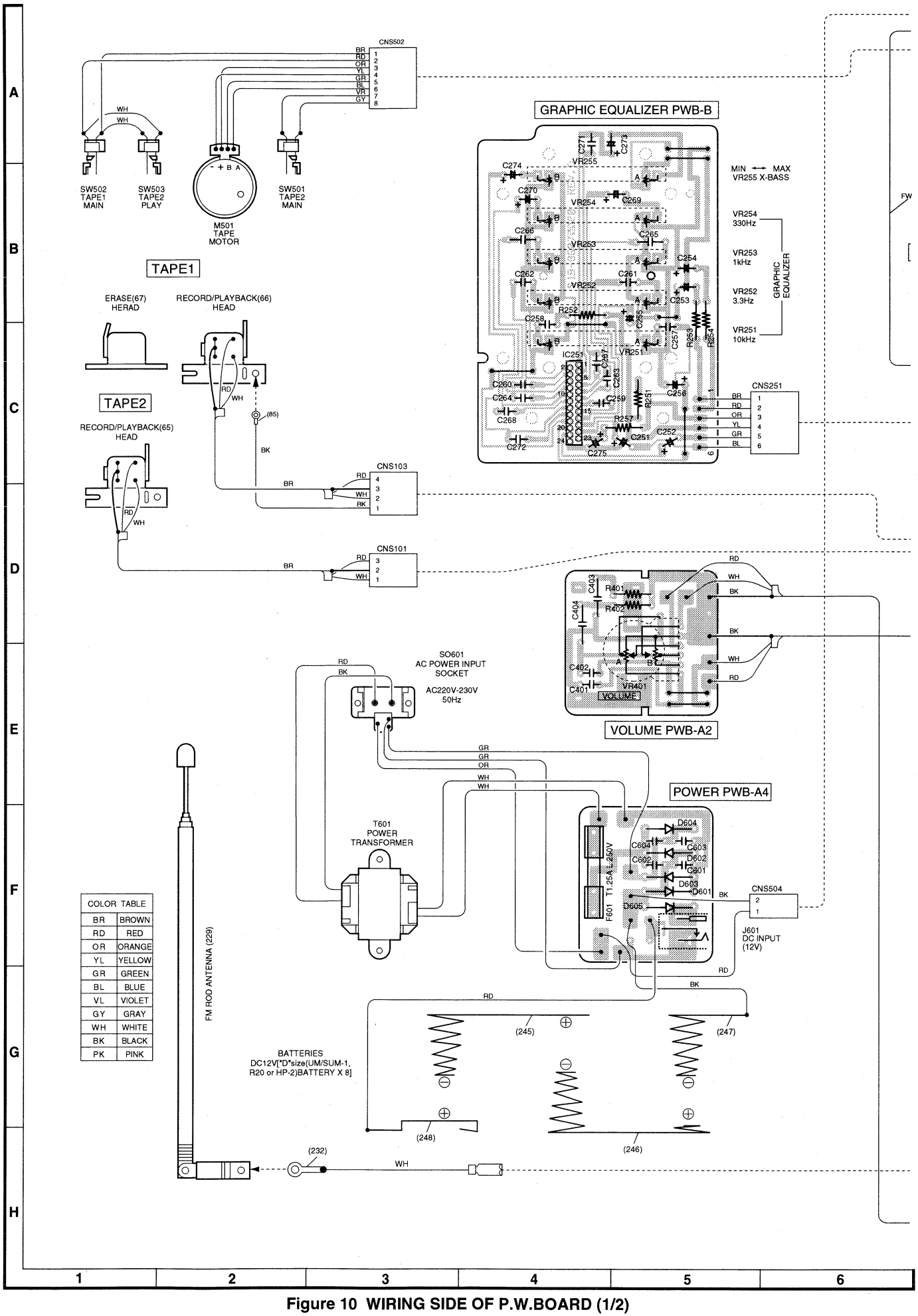
- NOTES ON SCHEMATIC DIAGRAM can be found on page 12.

Figure 8 SCHEMATIC DIAGRAM (1/2)



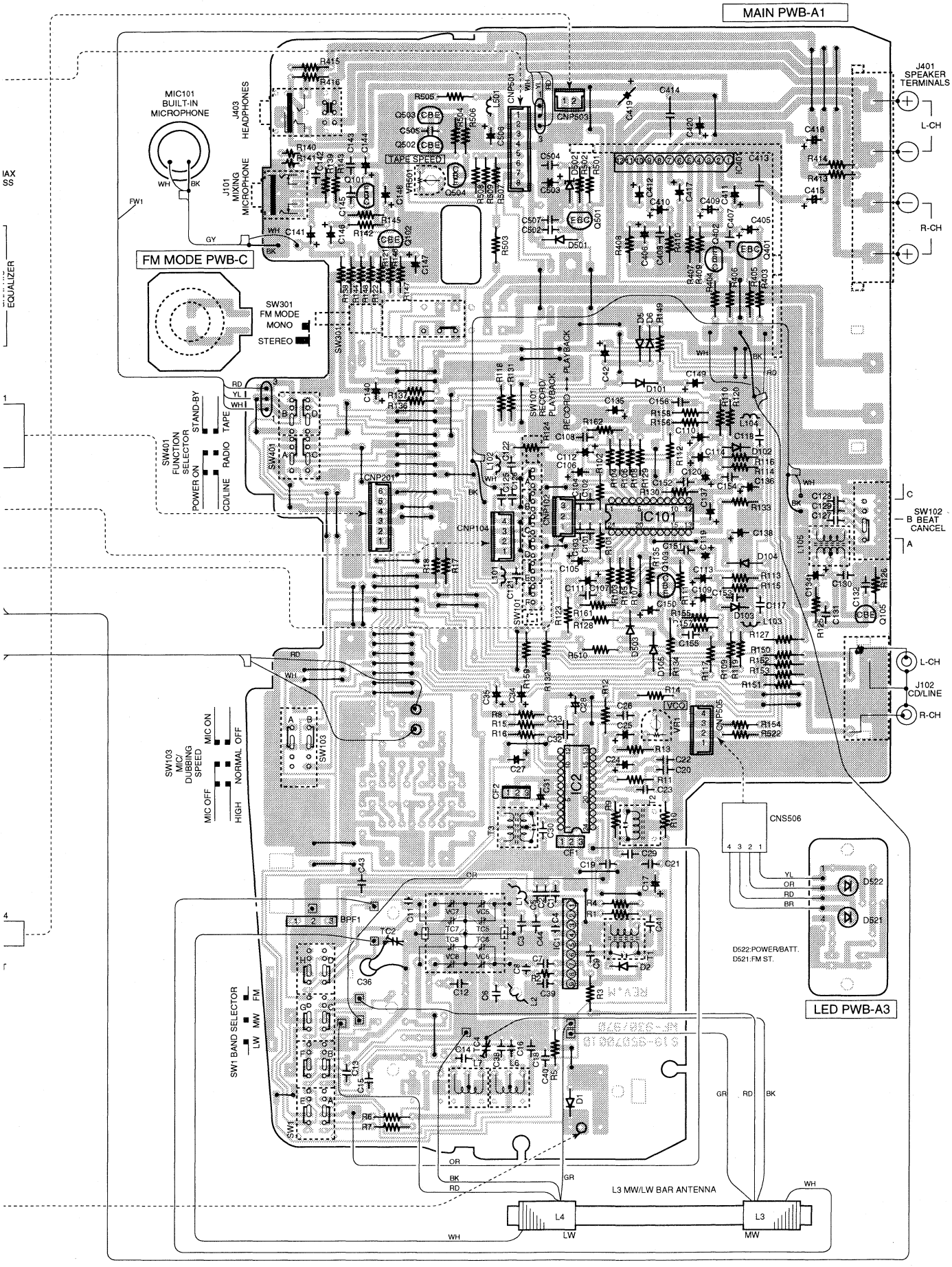
7	8	9	10	11	12

Figure 9 SCHEMATIC DIAGRAM (2/2)



COLOR TABLE	
BR	BROWN
RD	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH	WHITE
BK	BLACK
PK	PINK

Figure 10 WIRING SIDE OF P.W.BOARD (1/2)



7	8	9	10	11	12

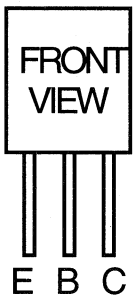
Figure 11 WIRING SIDE OF P.W.BOARD (2/2)

NOTES ON SCHEMATIC DIAGRAM

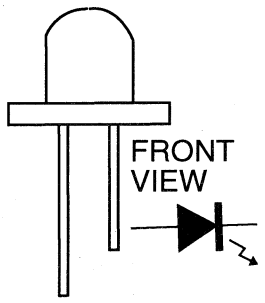
- Resistor:
  To differentiate the units of resistors, The symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is an ohm resistor. The resistor designated "Fusible" is a fuse type resistor.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
  (CH),(RH),(UJ): Temperature compensation
  (ML): Mylar type
  (S): Styrol type

- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
- Schematic diagram and Wiring Side of P.W. Board for this model are subject to change for improvement without prior notice.
- Parts marked with "⚠" (⊏ ⎓ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO.	DESCRIPTION	POSITION
SW1	BAND SELECTOR	LW
SW101	RECORD/PLAYBACK	PLAYBACK
SW102	BEAT CANCEL	A
SW103	DUBBING SPEED/MIC/ FM MODE	MIC ON/ FM MONO
SW301	SURROUND	OFF
SW401	FANCTION SELECTOR	STAND-BY/TAPE
SW501	TAPE 2 MAIN	OFF
SW502	TAPE 1 MAIN	OFF
SW503	TAPE 2 PLAY	OFF



8050 D
8550 D
9014 C



L-34HD

Figure 12 TYPE OF TRANSISTOR AND LED

SHARP PARTS GUIDE

MODEL WF-931T(BK)

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

WF-931T

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
INTEGRATED CIRCUITS				
IC1	9FGS3200737872	J	AE	FM Front End,TA7378P
IC2	9FGS3200180561	J	AK	IF Amp.& FM MPX.,LA1805
IC101	9FGS3200818972	J	AH	Pre Amp.,TA8189N
IC251	9FGS3200382257	J	AH	Graphic Equalizer,BA3822LS
IC401	9FGS3200541557	J	AL	Power Amp.,BA5415
TRANSISTORS				
Q101~103	9FGS3390140332	J	AB	Silicon,NPN,9014 C
Q105	9FGS3380500432	J	AC	Silicon,NPN,8050 D
Q401,402	9FGS3390140332	J	AB	Silicon,NPN,9014 C
Q501	9FGS3380500432	J	AC	Silicon,NPN,8050 D
Q502,503	9FGS3390140332	J	AB	Silicon,NPN,9014 C
Q504	9FGS3385500432	J	AC	Silicon,PNP,8550 D
DIODES				
D1,2	9FGS3600414857	J	AA	Silicon,1N4148
D5,6	9FGS3600414857	J	AA	Silicon,1N4148
D101~105	9FGS3600414857	J	AA	Silicon,1N4148
D501	9FGS3600414857	J	AA	Silicon,1N4148
D502	9FGS3710823557	J	AB	Zener,8.2V,MTZJ8.2C
D503	9FGS3600414857	J	AA	Silicon,1N4148
D521,522	9FGS3523200100	J	AB	LED,Red,L-34HD
⚠D601~605	9FGS3600539200	J	AB	Silicon,1N5392
FILTERS				
BPF1	9FGS6319803002	J	AN	FM Band Pass Filter
CF1	9FGS6321072001	J	AC	FM IF,10.7 MHz
CF2	9FGS6324600002	J	AE	AM IF,460 kHz
TRANSFORMER				
T1	9FGS4741000701	J	AC	FM IF
T2	9FGS4741000701	J	AC	FM Detection
T3	9FGS4731000511	J	AC	AM IF
⚠T601	9FGS4857001132	J	AR	Power
COILS				
L1	9FGS4710040805	J		FM RF
L2	9FGS4710345804	J	AD	FM Oscillation
L3	9FGS4608011717	J	AB	MW Bar Antenna
L4	9FGS4624030700	J	AD	LW Bar Antenna
L6	9FGS4721000510	J	AC	MW Oscillation
L7	9FGS4721000540	J	AC	LW Oscillation
L101,102	9FGS4522340502	J	AC	22 mH,Choke
L103,104	9FGS4527240502	J	AC	2.7 mH,Choke
L105	9FGS4761000601	J	AD	Bias Oscillation
L501	9FGS4522042002	J	AC	22 µH,Choke
VARIABLE RESISTORS				
VR1	9FGS5392103001	J	AC	10 kohm (B),Semi-VR [VCO]
VR251~254	9FGS5342503002	J	AD	50 kohms (B)×2 [Graphic Equalizer]
VR255	9FGS5342503001	J	AD	50 kohms (B)×2 [X-BASS]
VR401	9FGS5323503001	J	AF	50 kohms (B)×2 [Volume]
VR501	9FGS5392222001	J	AC	2.2 kohms (B),Semi-VR [Tape Speed]
VARIABLE CAPACITORS				
TC2	9FGS5471312001	J	AE	Trimmer,30 pF
TC4	9FGS5471312001	J	AE	Trimmer,30 pF
VC5~8	9FGS5444211001	J	AD	Variable Capacitor with Trimmer (TC5~8)
CAPACITORS				
C1	VCCCPU1HH100J	J	AA	10 pF (CH),50V
C2	VCKYPU1HB102K	J	AA	0.001 µF,50V
C3	VCCCPU1HH3R0C	J	AA	3 pF (CH),50V
C4	VCCCPU1HH5R0C	J	AA	5 pF (CH),50V
C5	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C6	VCCCRU1HH100J	J		10 pF (RH),50V
C7	VCCCPU1HH3R0C	J	AA	3 pF (CH),50V
C8	VCCCPU1HH150J	J	AA	15 pF (CH),50V
C9	VCKZPU1HF203Z	J	AA	0.02 µF,50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C11	VCCCPU1HH5R0C	J	AA	5 pF (CH),50V
C13	9FGS4323014120	J	AG	300 pF,50V,Styrol
C14	9FGS4322414120	J	AB	240 pF,50V,Styrol
C16	VCCCPU1HH7R0C	J	AA	7 pF (CH),50V
C17	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C18,19	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C20	VCQYKU1HM392K	J	AA	0.0039 µF,50V,Mylar
C21	VCKZPU1HF403Z	J	AA	0.04 µF,50V
C22	VCKYPU1HB471K	J	AA	470 pF,50V
C23	VCQYKU1HM822K	J	AA	0.0082 µF,50V,Mylar
C24,25	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C26	VCQSMA1HL152J	J	AB	0.0015 µF,50V,Styrol
C27	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C28	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C29	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C30	VCKZPU1HF403Z	J	AA	0.04 µF,50V
C31	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C32,33	VCQYKU1HM123K	J	AA	0.012 µF,50V,Mylar
C34,35	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C36	VCCCPU1HH390J	J	AB	39 pF (CH),50V
C38	VCCSPU1HL181J	J	AA	180 pF,50V
C39,40	VCKYPU1HB102K	J	AA	0.001 µF,50V
C41	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C42	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C43,44	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C101~104	VCKYPU1HB821K	J	AA	820 pF,50V
C105,106	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C107,108	VCQYKU1HM333K	J	AB	0.033 µF,50V,Mylar
C109~112	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C113,114	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C117,118	VCQYKU1HM153K	J	AA	0.015 µF,50V,Mylar
C119,120	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C121,122	VCCSPU1HL131J	J	AB	130 pF,50V
C125,126	VCCSPU1HL151J	J	AA	150 pF,50V
C127	VCCSPU1HL121J	J	AA	120 pF,50V
C128	VCCSPU1HL331J	J	AA	330 pF,50V
C129	VCQYKU1HM102K	J	AA	0.001 µF,50V,Mylar
C130	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C131	VCQYKU1HM822K	J	AA	0.0082 µF,50V,Mylar
C132	VCQYKU1HM123K	J	AA	0.012 µF,50V,Mylar
C134	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C135,136	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C137	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C138	RC-GZW228AF1A	J	AE	2200 µF,10V,Electrolytic
C140	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C141	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C142	VCQYKU1HM183K	J	AB	0.018 µF,50V,Mylar
C143	VCKYPU1HB102K	J	AA	0.001 µF,50V
C144	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C145	VCKYPU1HB221K	J	AA	220 pF,50V
C146	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C147	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C148	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C149	RC-GZA106AF1E	J	AA	10 µF,25V,Electrolytic
C150	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C151,152	VCCSPU1HL331J	J	AA	330 pF,50V
C153,154	VCQYKU1HM102K	J	AA	0.001 µF,50V,Mylar
C155,156	VCQYKU1HM822K	J	AA	0.0082 µF,50V,Mylar
C251,252	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C253,254	RC-EZD105AF1H	J	AB	1 µF,50V,Electrolytic
C255,256	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C257,258	VCQYKU1HM223K	J	AB	0.022 µF,50V,Mylar
C259,260	VCQYKU1HM102K	J	AA	0.001 µF,50V,Mylar
C261,262	VCQYKU1HM333K	J	AB	0.033 µF,50V,Mylar
C263,264	VCQYKU1HM332K	J	AA	0.0033 µF,50V,Mylar
C265,266	VCQYKU1HM104K	J	AB	0.1 µF,50V,Mylar
C267,268	VCQYKU1HM103K	J	AA	0.01 µF,50V,Mylar
C269,270	RC-GZA334AF1H	J	AA	0.33 µF,50V,Electrolytic
C271,272	VCQYKU1HM333K	J	AB	0.033 µF,50V,Mylar
C273,274	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C275	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C401,402	VCQYKU1HM182K	J	AA	0.0018 µF,50V,Mylar
C403,404	VCQYKU1HM683K	J	AB	0.068 µF,50V,Mylar
C405,406	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C407,408	VCKYPU1HB102K	J	AA	0.001 µF,50V
C409,410	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C411,412	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C413,414	VCQYKU1HM224K	J	AD	0.22 µF,50V,Mylar
C415,416	RC-GZS108AF1C	J	AD	1000 µF,16V,Electrolytic
C417	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C419	RC-GZW228AF1E	J	AE	2200 µF,25V,Electrolytic
C420	RC-GZA226AF1E	J	AB	22 µF,25V,Electrolytic

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C502	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C503	RC-GZA227AF1A	J	AB	220 µF,10V,Electrolytic
C504,505	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C506	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C507	VCKZPU1HF203Z	J	AA	0.02 µF,50V
C601~604	VCKZPU1HF203Z	J	AA	0.02 µF,50V

RESISTORS

R1	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R2	VRD-ST2EE330J	J	AA	33 ohms,1/4W
R3	VRD-ST2EE224J	J	AA	220 kohms,1/4W
R4	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R5	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R6,7	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R8	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R9	VRD-ST2EE392J	J	AA	3.9 kohms,1/4W
R10	VRD-ST2EE474J	J	AA	470 kohms,1/4W
R11	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R12	VRD-ST2EE104J	J	AA	100 kohm,1/4W
R13	VRD-ST2EE153J	J	AA	15 kohms,1/4W
R14	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R15,16	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R17,18	VRD-ST2EE272J	J	AA	2.7 kohms,1/4W
R101,102	VRD-ST2EE560J	J	AA	56 ohms,1/4W
R103,104	VRD-ST2EE184J	J	AA	180 kohms,1/4W
R105,106	VRD-ST2EE562J	J	AA	5.6 kohms,1/4W
R107,108	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R109,110	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R111,112	VRD-ST2EE184J	J	AA	180 kohms,1/4W
R113,114	VRD-ST2EE222J	J	AA	2.2 kohms,1/4W
R115,116	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R117,118	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R119,120	VRD-ST2EE473J	J	AA	47 kohms,1/4W
R121,122	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R123,124	VRD-ST2EE123J	J	AA	12 kohms,1/4W
R125	VRD-ST2EE273J	J	AA	27 kohms,1/4W
R126	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R127,128	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R129~131	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R132	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R133	VRD-ST2EE105J	J	AA	1 Mohm,1/4W
R134,135	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R136	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R137	VRD-ST2EE822J	J	AA	8.2 kohms,1/4W
R138	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R139	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R140	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R141	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R142	VRD-ST2EE334J	J	AA	330 kohms,1/4W
R143	VRD-ST2EE680J	J	AA	68 ohms,1/4W
R144	VRD-ST2EE473J	J	AA	47 kohms,1/4W
R145	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R146,147	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R148	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R149	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R150,151	VRD-ST2EE473J	J	AA	47 kohms,1/4W
R152,153	VRD-ST2EE222J	J	AA	2.2 kohms,1/4W
R154	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R155,156	VRD-ST2EE334J	J	AA	330 kohms,1/4W
R157~159	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R161,162	VRD-ST2EE683J	J	AA	68 kohms,1/4W
R251,252	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R253,254	VRD-ST2EE222J	J	AA	2.2 kohms,1/4W
R257	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R401,402	VRD-ST2EE562J	J	AA	5.6 kohms,1/4W
R403~406	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R407,408	VRD-ST2EE333J	J	AA	33 kohms,1/4W
R409,410	VRD-ST2EE121J	J	AA	120 ohms,1/4W
R413,414	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R415,416	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R501	VRD-ST2EE681J	J	AA	680 ohms,1/4W
R502	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R503~505	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R506	VRD-ST2EE104J	J	AA	100 kohm,1/4W
R507	VRD-ST2EE682J	J	AA	6.8 kohms,1/4W
R508	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R509	VRD-ST2EE563J	J	AA	56 kohms,1/4W
R510	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R522	VRD-ST2EE471J	J	AA	470 ohms,1/4W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

OTHER CIRCUITRY PARTS

CNP102	9FGS9425031001	J	AB	Plug,3Pin
CNP104	9FGS9425041001	J	AB	Plug,4Pin
CNP201	9FGS9425061001	J	AC	Plug,6Pin
CNP501	9FGS9425081001	J	AC	Plug,8Pin
CNP503	9FGS9425021001	J	AB	Plug,2Pin
CNP505	9FGS9425041001	J	AB	Plug,4Pin
CNS101	9FGS9395070301	J	AD	Connector Ass'y,3Pin
CNS103	9FGS9395070401	J	AE	Connector Ass'y,4Pin
CNS251	9FGS9395070601	J	AD	Connector Ass'y,6Pin
CNS502	9FGS9395070801	J	AE	Connector Ass'y,8Pin
CNS504	9FGS9395070201	J	AC	Connector Ass'y,2Pin
CNS506	9FGS9395070402	J	AD	Connector Ass'y,4Pin
⚠ F601	9FGS6921123101	J	AC	Fuse,T1.25A L 250V
FW1	9FGS9504161001	J	AB	Flat Wire,3Pin
J101	9FGS5652355001	J	AC	Jack,Mixing Microphone
J102	9FGS5653854001	J	AD	Jack,CD/Line Input
J401	9FGS5640043001	J	AE	Terminal,Speaker
J403	9FGS5652353401	J	AE	Jack,Headphones
J601	9FGS5654633000	J	AE	Jack,DC Power Input
M501	9FG19900000096	J	AQ	Motor with Pulley [Tape]
MIC101	9FGS6121101001	J	AD	Built-in Microphone
⚠ SO601	9FGS5633022101	J	AE	Socket,AC Power Input
SW1	9FGS5118030012	J	AD	Switch,Slide Type [Band Selector]
SW101	9FGS5146020013	J	AC	Switch,Push Type [Record/Playback]
SW102	9FGS5112030012	J	AC	Switch,Slide Type [Beat Cancel]
SW103	9FGS5112030022	J	AC	Switch,Slide Type [Dubbing Speed/Mic]
SW301	9FGS5142020012	J	AD	Switch,Push Type [FM Mode]
SW401	9FGS5114030012	J	AC	Switch,Slide Type [Function Selector]
SW501	9FG19900000126	J	AF	Switch,Leaf Type [Tape 2 Main]
SW502	9FG19900000126	J	AF	Switch,Leaf Type [Tape 1 Main]
SW503	9FG19900000101	J	AD	Switch,Leaf Type [Tape 2 Play]

MECHANICAL PARTS

1	9FG19900000108	J	AQ	Base Ass'y
2	9FG19900000109	J	AE	Lever,Switch Actuator
3	9FG19900000110	J	AG	Lever,Actuator Push Button
4	9FG19900000111	J	AF	Lever,Record Button
5	9FG19900000112	J	AE	Lever,Play Button
6	9FG19900000113	J	AE	Lever,Rewind Button
7	9FG19900000114	J	AE	Lever,Fast Forward Button
8	9FG19900000115	J	AE	Lever,Stop Button
9	9FG19900000116	J	AF	Pause Button Lever Ass'y
10	9FG19900000117	J	AC	Spring,Pause Control
11	9FG19900000118	J	AC	Lever,Pause
12	9FG19900000119	J	AC	Spring,Pause Lever
13	9FG19900000120	J	AC	Stopper,Pause Lever
14	9FG19900000121	J	AC	Spring,Button Lever
15	9FG19900000176	J	AN	Main Chassis Ass'y
16	9FG19900000122	J	AC	Spring,Eject Actuator
17	9FG19900000174	J	AC	Spring,Playback Lever
19	9FG19900000123	J	AC	Lever,E Kick
21	9FG19900000124	J	AC	Spring,Record Button Lever
22	9FG19900000125	J	AC	Spring,Button Lever
24	9FG19900000127	J	AC	Spring,Erase Head Arm
25	9FG19900000128	J	AH	Plate,Head
26	9FG19900000129	J	AD	Spring,Pause Button Lever
27	9FG19900000130	J	AE	Head Base
28	9FG19900000131	J	AC	Spring,Button Lever
29	9FG199000J0132	J	AC	Spring,Head Plate
30	9FG19900000133	J	AD	Spring,M Control
31	9FG19900000134	J	AD	Arm,Pause Cam
32	9FG19900000135	J	AD	Coller,Pause Arm
33	9FG19900000136	J	AE	Arm,Erase Head
34	9FG19900000137	J	AC	Spring,Head Azimuth
35	9FG19900000038	J	AM	Pinch Roller Arm Ass'y
38	9FG19900000138	J	AD	Lever,Sensing
39	9FG19900000139	J	AG	REW/FF Clutch Ass'y
40	9FG19900000140	J	AF	FF/REW Belt
43	9FG19900000141	J	AQ	Flywheel Ass'y,Tape 2
44	9FG19900000142	J	AQ	Flywheel Ass'y,Tape 1
45	9FG19900000143	J	AC	Spring,Gear Plate
46	9FG19900000144	J	AL	Gear Plate Ass'y
47	9FG19900000145	J	AF	Gear,Cam
49	9FG19900000146	J	AD	Gear,Fast Forward
50	9FG19900000147	J	AC	Spring,Back Tension

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
51	9FG19900000148	J	AE	Supply Reel Ass'y
52	9FG19900000149	J	AF	Take Up Reel Ass'y
53	9FG19900000150	J	AC	Detection Sensor
55	9FG19900000151	J	AR	Bracket,Motor
56	9FG19900000152	J	AD	Rubber,Motor
57	9FG19900000153	J	AD	Screw,Special
59	9FG19900000099	J	AC	Main Belt
60	9FG19900000154	J	AD	Mat,Anti Vibration Felt
62	9FG19900000155	J	AE	Lever,Eject Slide
64	9FG19900000156	J	AD	Plate,Cassette
65	9FG19900000100	J	AK	Head,Playback
66	9FG19900000100	J	AK	Head,Record/Playback
67	9FG19900000009	J	AG	Head,Erase
69	9FG19900000157	J	AD	Lever,Record Safety
71	9FG19900000158	J	AC	Screw,ø2×3mm
72	9FG19900000159	J	AC	Screw,ø2×4mm
73	9FG19900000160	J	AC	Screw,ø2×5mm
74	9FG19900000161	J	AC	Screw,ø2×4.5mm
75	9FG19900000162	J	AC	Screw,ø2×6mm
76	9FG19900000163	J	AC	Screw,ø2×3mm
77	9FG19900000164	J	AC	Screw,ø2×3mm
78	9FG19900000165	J	AC	Screw,ø2×7mm
83	9FG19900000166	J	AC	Washer,ø1.2×ø3.8×0.3mm
84	9FG19900000167	J	AC	Washer,ø1.45×ø3.8×0.5mm
85	9FG19900000168	J	AC	Lug
91	9FG19900000169	J	AD	Lever,P Kick
92	9FG19900000170	J	AG	Lever,P Kick
93	9FG19900000171	J	AD	Screw,P Kick Lever
94	9FG19900000172	J	AD	Screw,P Kick Lever
95	9FG19900000173	J	AC	Spring,P Kick Lever
M501	9FG19900000096	J	AQ	Motor with Pulley [Tape]
SW501	9FG19900000126	J	AF	Switch,Leaf Type [Tape 2 Main]
SW502	9FG19900000126	J	AF	Switch,Leaf Type [Tape 1 Main]
SW503	9FG19900000101	J	AD	Switch,Leaf Type [Tape 2 Play]

CABINET PARTS

201	9FG10195070014	J	BA	Front Cabinet Ass'y
202	9FG10195070024	J	BA	Rear Cabinet
203	9FG10295070110	J	AA	Dial Pointer
204	9FG10295070080	J	AA	Gear,Cassette Holder
205	9FG10395070030	J	AA	Decoration Panel,Dial Pointer
206	9FG10195070100	J	AA	SHARP Badge
207	9FG10495070160	J	AA	Knob [Volume Control]
208	9FG10495070180	J	AA	Holder,Volume Knob
209	9FG10295070090	J	AA	Holder,Cassette Holder Gear
210	9FG10295070020	J	AB	Lever,Record
211	9FG10295070030	J	AB	Bracket,Graphic Equalizer
212	9FG10295070040	J	AB	Holder,Record Lever
213	9FG10295070140	J	AB	Dial Drum
214	9FG10295070050	J	AB	Bracket,Dial Drum
215	9FG10495070210	J	AB	Knob [Tuning Control]
218	9FG10295070060	J	AA	Holder,Built-in Microphone
219	9FG10201180010	J	AA	Holder,MW/LW Bar Antenna
220	9FG10295070120	J	AC	Cassette Holder [Tape 1]
221	9FG10295070130	J	AC	Cassette Holder [Tape 2]
222	9FG10195070070	J	AC	Cover,Cassette Holder [Tape 1]
223	9FG10195070080	J	AC	Cover,Cassette Holder [Tape 2]
224	9FG10395070013	J	AD	Decoration Panel,Cassette Holder [Tape 1]
225	9FG10395070020	J	AC	Decoration Panel,Cassette Holder [Tape 2]
226	9FG13594020013	J	AB	Spring,Cassette Holder Up
228	9FGS6581101001	J	AD	Ferrite Bar
229	9FG29106220140	J	AG	FM Rod Antenna
230	9FG10195070090	J	AE	Handle
231	9FG10195070110	J	AE	Battery Compartment Lid
232	9FGS9895019001	J	AB	Lug with Wire
⚠233	9FGS6931220010	J	AB	Fuse Holder
234	9FG10293190100	J	AA	Holder,AC Socket
236	9FG10295070100	J	AA	Holder,FM Mode Switch
238	9FG13294020010	J	AB	Bracket,Power PWB
239	9FG13295070070	J	AC	Plate,Record
240	9FG13295070060	J	AB	Plate,Cassette Button Holder
241	9FG13295070030	J	AB	Holder Plate,Front Cabinet
242	9FG13295070050	J	AD	Cover,Power Transformer
243	9FG13394020020	J	AC	Shaft,Cassette Button
244	9FG13495080010	J	AF	Heat Sink
245	9FG13595070020	J	AB	Spring,Battery,+/-
246	9FG13595070030	J	AB	Spring,Battery,+/-
247	9FG13595070040	J	AB	Spring,Battery,-
248	9FG13595070010	J	AB	Spring,Battery,+

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
249	9FG10495070010	J	AA	Button,Record [Tape 1]
250	9FG10495070020	J	AA	Button,Play [Tape 1]
251	9FG10495070030	J	AA	Button,Rewind [Tape 1]
252	9FG10495070040	J	AA	Button,Fast Forward [Tape 1]
253	9FG10495070050	J	AA	Button,Stop/Eject [Tape 1]
254	9FG10495070060	J	AA	Button,Pause [Tape 1]
255	9FG10495070070	J	AA	Button,Play [Tape 2]
256	9FG10495070080	J	AA	Button,Rewind [Tape 2]
257	9FG10495070090	J	AA	Button,Fast Forward [Tape 2]
258	9FG10495070100	J	AA	Button,Stop/Eject [Tape 2]
259	9FG10495070110	J	AA	Knob [X-BASS]
260	9FG10495070120	J	AA	Knob [Graphic Equalizer A]
261	9FG10495070130	J	AA	Knob [Graphic Equalizer B]
262	9FG10495070140	J	AA	Knob [Graphic Equalizer C]
263	9FG10495070150	J	AA	Knob [Graphic Equalizer D]
264	9FG10495070170	J	AA	Ring,FM Mode Knob
265	9FG10495070190	J	AA	Knob [FM Mode]
266	9FG10495070220	J	AA	Knob [Function Selector]
267	9FG10495070230	J	AA	Knob [Dubbing Speed/Mic]
268	9FG10495070240	J	AA	Knob [Band Selector]
269	9FG20895080015	J		Label,Specifications
270	9FG19995070020	J	AB	Shield,Graphic Equalizer PWB
271	9FG17006300000	J	AA	Terminal,Lug
273	9FG19495070010	J	AA	Cushion,Microphone
274	9FG19495070020	J	AA	Cushion,Battery Lid
275	9FG19593160001	J	AA	Rubber Pad,Transformer
277	9FG19295070010	J	AA	Felt,Paper
278	9FG19595070010	J	AA	Cushion,Rear Cabinet
280	9FG10395070044	J	AF	Decoration Panel,MW/FM/LW Control
281	9FG13295070010	J	AC	Bracket,Volume PWB
284	9FGS5640013001	J	AB	Terminal,Main PWB
285	9FG19593160003	J	AA	Leg Cushion
287	9FG13295070080	J	AB	Plate,Antenna Holder
289	9FG19595070020	J	AB	Rubber
291	9FG10295070160	J	AA	Transformer Holder
602	9FG16101260500	J	AA	Screw,ø2.6×5mm
603	9FG16101300801	J	AA	Screw,ø3×8mm
604	9FG16104301001	J	AA	Screw,ø3×10mm
606	9FG16201300800	J	AA	Screw,ø3×8mm
609	9FG16202300800	J	AA	Screw,ø3×8mm
610	9FG16202301000	J	AA	Screw,ø3×10mm
615	9FG15130101001	J	AA	Washer,ø3×ø10×1mm
618	9FG15630101605	J	AA	Fiber Washer
619	9FG16201260600	J	AA	Screw,ø2.6×6mm
621	9FG16201301200	J	AA	Screw,ø3×12mm
624	9FG16205302000	J	AA	Screw,ø3×20mm
625	9FG16401301000	J	AA	Screw,ø3×10mm
626	9FG16201301000	J	AA	Screw,ø3×10mm
627	9FG16204300801	J	AA	Screw,ø3×8mm
628	9FG9P0420031	J	AA	Screw,ø2×3mm
620	9FG16201302001	J	AA	Screw,ø3×20mm

SPEAKER BOX PARTS

301	9FGS9851820001	J	AD	Cord,Speaker
302	9FG10295080010	J	AA	Bushing,Speaker Cord
303	9FG10195080015	J	AH	Front Panel Ass'y,Speaker,Left
304	9FG10195080025	J	AH	Front Panel Ass'y,Speaker,Right
305	9FG10195080030	J	AN	Speaker Box,Left
306	9FG10195080040	J	AN	Speaker Box,Right
307	9FG10195070100	J	AA	SHARP Badge
701	9FG16201301601	J	AA	Screw,ø3×16mm
702	9FG16205300800	J	AA	Screw,ø3×8mm
SP701,702	9FGS6111012001	J	AM	Woofer
SP703,704	9FGS6131152001	J	AB	Tweeter

ACCESSORIES/PACKING PARTS

	9FGS9822020300	J	AK	AC Power Supply Cord with Polyethylene Bag/Pad
⚠	9FG20095080004	J	AH	Operation Manual
	9FG20595070010	J	AP	Packing Case
	9FG20895070001	J	AE	Label,Feature
	9FG21195070010	J	AD	Polyethylene Bag,Speaker
	9FG21195070020	J	AD	Polyethylene Bag,Unit
	9FG21295080010	J	AF	Packing Add.,Top,Left
	9FG21295080020	J	AE	Packing Add.,Top,Right
	9FG21295080030	J	AH	Packing Add.,Bottom,Left
	9FG21295080040	J	AH	Packing Add.,Bottom,Right

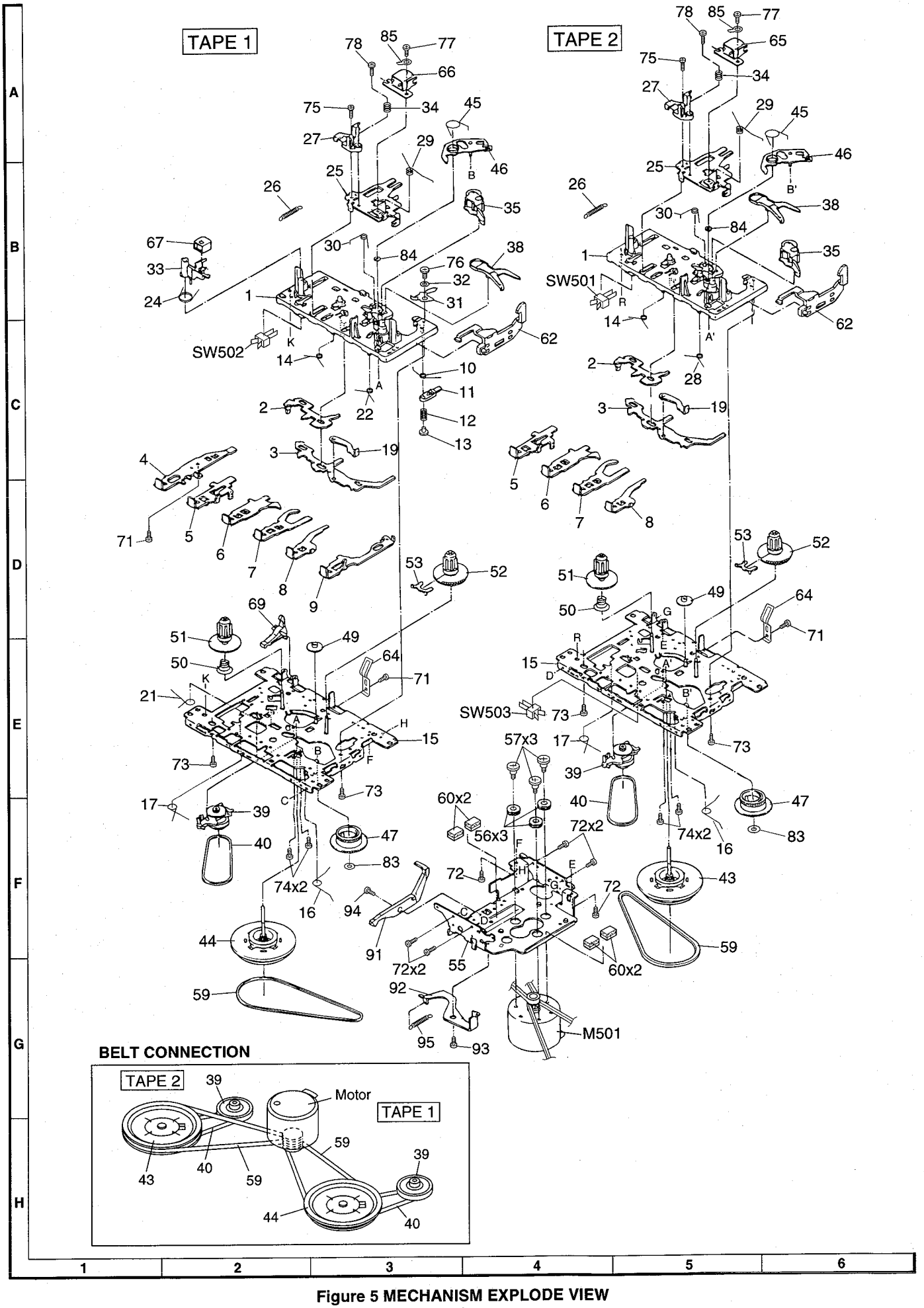


Figure 5 MECHANISM EXPLODE VIEW

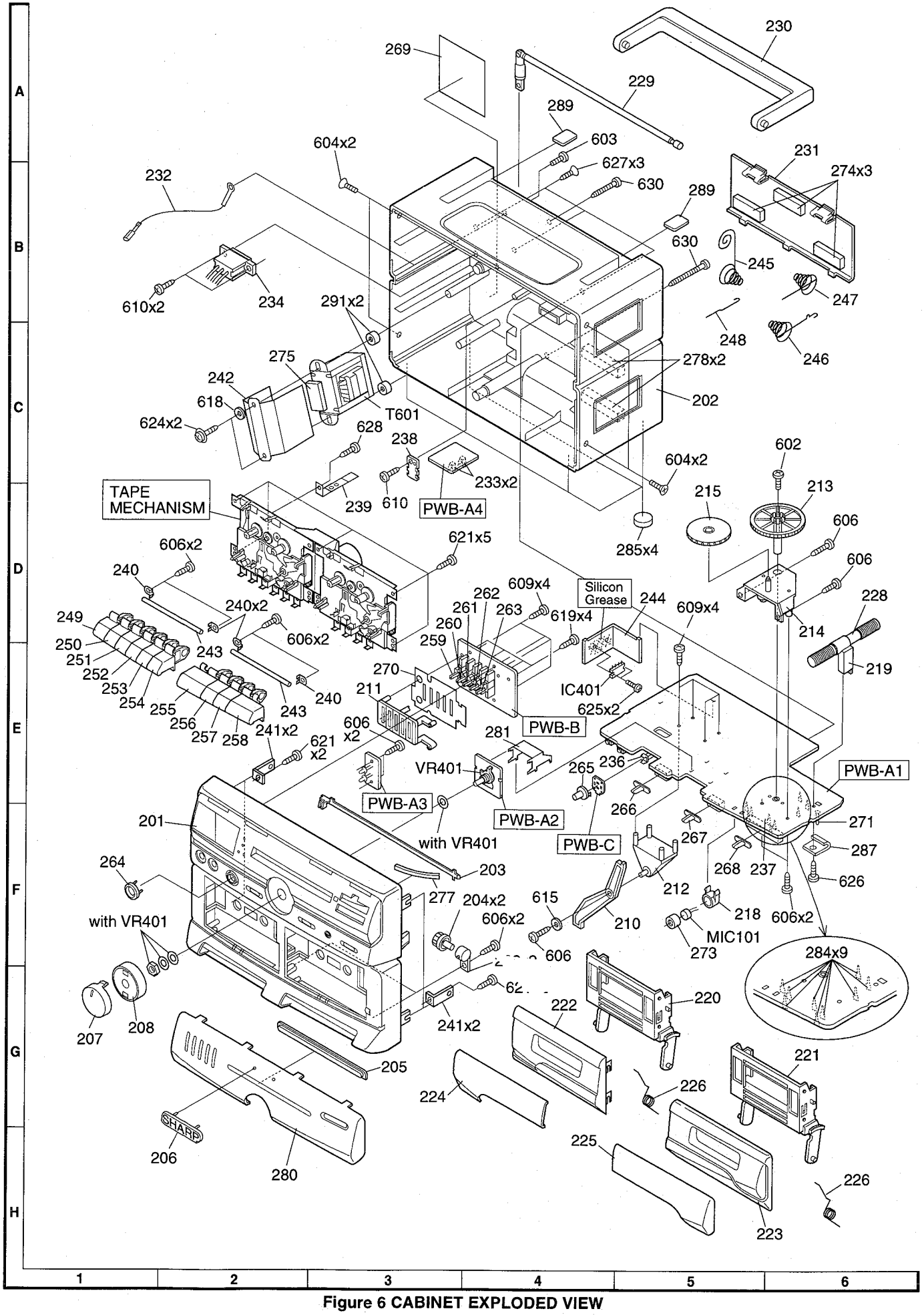


Figure 6 CABINET EXPLODED VIEW

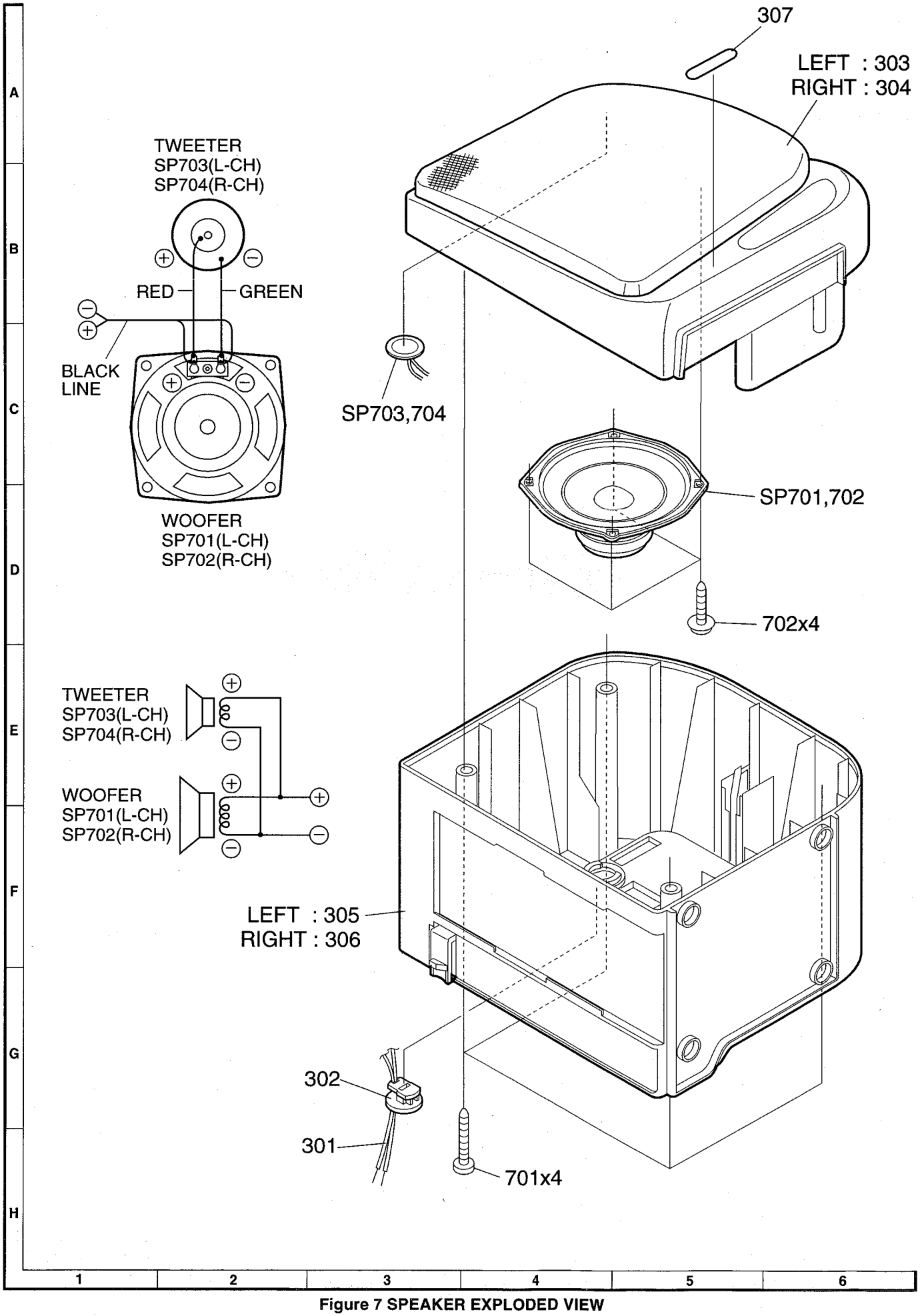


Figure 7 SPEAKER EXPLODED VIEW